

DAFTAR PUSTAKA

- Agarwal, A., Deepinder, F., & Sabanegh, E. S. (2010). Male Infertility. In *Evidence-Based Urology*. <https://doi.org/10.1002/9781444323146.ch16>
- Agarwal, A., Makker, K., & Sharma, R. (2008). Clinical relevance of oxidative stress in male factor infertility: An update. *American Journal of Reproductive Immunology*. <https://doi.org/10.1111/j.1600-0897.2007.00559.x>
- Agarwal, A., Sharma, R., Harlev, A., & Esteves, S. (2016). Effect of varicocele on semen characteristics according to the new 2010 World Health Organization criteria: A systematic review and meta-analysis. *Asian Journal of Andrology*, 18(2), 163–170. <https://doi.org/10.4103/1008-682X.172638>
- AlQefari, G. B., Alduraibi, K. I., Almansour, A. A., Alghamdi, A., & Alsubhi, M. A. (2022). Nutcracker Phenomenon: A Rare Incidental Finding. *Cureus*. <https://doi.org/10.7759/cureus.32822>
- Alshahrani, S., McGill, J., & Agarwal, A. (2013). Prostatitis and male infertility. *Journal of Reproductive Immunology*. <https://doi.org/10.1016/j.jri.2013.05.004>
- Arafa, M., Henkel, R., Agarwal, A., Majzoub, A., & Elbardisi, H. (2019). Correlation of oxidation–reduction potential with hormones, semen parameters and testicular volume. *Andrologia*, 51(5). <https://doi.org/10.1111/and.13258>
- Badan Pusat Statistik Indonesia. (2013). *Proyeksi Penduduk Indonesia Indonesia Population Projection 2010-2035*. Badan Pusat Statistik Indonesia.
- Bendayan, M., Alter, L., Swierkowski-Blanchard, N., Caceres-Sanchez, L., Selva, J., Robin, G., & Boitrelle, F. (2018). Environment and lifestyle: Impacts on male fertility? *Gynecologie Obstetrique Fertilité et Senologie*. <https://doi.org/10.1016/j.gofs.2017.11.003>
- Brugh, V. M., & Lipshultz, L. I. (2004). Male factor infertility: Evaluation and management. *Medical Clinics of North America*. [https://doi.org/10.1016/S0025-7125\(03\)00150-0](https://doi.org/10.1016/S0025-7125(03)00150-0)
- Cannarella, R., Calogero, A. E., Condorelli, R. A., Giacone, F., Aversa, A., & La Vignera, S. (2019). Management and treatment of varicocele in children and adolescents: An endocrinologic perspective. *Journal of Clinical Medicine*. <https://doi.org/10.3390/jcm8091410>
- Cannarella, R., Shah, R., Abo-Elmagd Abdel-Meguid Hamoda, T., Boitrelle, F., Saleh, R., Gul, M., ... Agarwal, A. (2023). Does Varicocele Repair Improve Conventional Semen Parameters? A Meta-Analytic Study of Before-After Data. *World Journal of Men's Health*, 41. <https://doi.org/10.5534/wjmh.230034>
- Chen, Y. A., Huang, Z. W., Tsai, F. S., Chen, C. Y., Lin, C. M., & Wo, A. M. (2011). Analysis of sperm concentration and motility in a microfluidic device. *Microfluidics and Nanofluidics*. <https://doi.org/10.1007/s10404-010-0646-8>
- Chung, E., & Brock, G. B. (2011). Cryptorchidism and its impact on male fertility:

- A state of art review of current literature. *Journal of the Canadian Urological Association*. <https://doi.org/10.5489/cuaj.1010>
- Condorelli, R. A., Calogero, A. E., Vicari, E., Mongioi', L., Burgio, G., Cannarella, R., ... La Vignera, S. (2014). Reduced seminal concentration of CD45pos cells after follicle-stimulating hormone treatment in selected patients with idiopathic oligoasthenoteratozoospermia. *International Journal of Endocrinology*, 2014. <https://doi.org/10.1155/2014/372060>
- Cong, J., Li, P., Zheng, L., & Tan, J. T. (2016). Prevalence and risk factors of infertility at a rural site of Northern China. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0155563>
- Crawford, N. M., & Steiner, A. Z. (2015). Age-related infertility. *Obstetrics and Gynecology Clinics of North America*. <https://doi.org/10.1016/j.ogc.2014.09.005>
- Dahlan, M. (2016). *Besar Sampel dalam Penelitian Kedokteran dan Kesehatan. Sagung Seto*.
- Elizur, S. E., & Tulandi, T. (2008). Drugs in infertility and fetal safety. *Fertility and Sterility*. <https://doi.org/10.1016/j.fertnstert.2008.02.092>
- Fallara, G., Capogrosso, P., Pozzi, E., Belladelli, F., Corsini, C., Boeri, L., ... Salonia, A. (2023). The Effect of Varicocele Treatment on Fertility in Adults: A Systematic Review and Meta-analysis of Published Prospective Trials. *European Urology Focus*. <https://doi.org/10.1016/j.euf.2022.08.014>
- Foroughi, A. A., Dallaki, M., Hosseini, S. A., & Ariaifar, A. (2022). Relationship of Clinical and Ultrasonographic Grading of Varicocele with Semen Analysis Profile and Testicular Volume. *Journal of Reproduction and Infertility*, 23(2), 84–92. <https://doi.org/10.18502/jri.v23i2.8992>
- Franco, A., Proietti, F., Palombi, V., Savarese, G., Guidotti, M., Leonardo, C., ... Franco, G. (2023). Varicocele: To Treat or Not to Treat? *Journal of Clinical Medicine*. <https://doi.org/10.3390/jcm12124062>
- Franken, D. R., & Oehninger, S. (2012). Semen analysis and sperm function testing. *Asian Journal of Andrology*. <https://doi.org/10.1038/aja.2011.58>
- Gameiro, S. (2015). Infertility. In *Encyclopedia of Mental Health: Second Edition*. <https://doi.org/10.1016/B978-0-12-397045-9.00159-2>
- Garolla, A., Torino, M., Miola, P., Caretta, N., Pizzol, D., Menegazzo, M., ... Foresta, C. (2015). Twenty-four-hour monitoring of scrotal temperature in obese men and men with a varicocele as a mirror of spermatogenic function. *Human Reproduction*, 30(5). <https://doi.org/10.1093/humrep/dev057>
- Gill, K., Kups, M., Harasny, P., Machalowski, T., Grabowska, M., Lukaszuk, M., ... Piasecka, M. (2021). The negative impact of varicocele on basic semen parameters, sperm nuclear dna dispersion and oxidation-reduction potential in semen. *International Journal of Environmental Research and Public Health*, 18(11), 1–16. <https://doi.org/10.3390/ijerph18115977>
- Gnoth, C., Godehardt, E., Frank-Herrmann, P., Friol, K., Tigges, J., & Freundl, G. (2005). Definition and prevalence of subfertility and infertility. *Human Reproduction*. <https://doi.org/10.1093/humrep/deh870>
- Gunasekaran, K. (2016). Varicocele. In *Male Infertility: A Clinical Approach*. https://doi.org/10.1007/978-81-322-3604-7_9

- Gupta, S., Sharma, R., Agarwal, A., Boitrelle, F., Finelli, R., Farkouh, A., ... Shah, R. (2022). Antisperm Antibody Testing: A Comprehensive Review of Its Role in the Management of Immunological Male Infertility and Results of a Global Survey of Clinical Practices. *World Journal of Men's Health*, 40(3). <https://doi.org/10.5534/wjmh.210164>
- Hallgren, K. A. (2012). Computing Inter-Rater Reliability for Observational Data: An Overview and Tutorial. *Tutorials in Quantitative Methods for Psychology*, 8(1). <https://doi.org/10.20982/tqmp.08.1.p023>
- Halpern, J., Mittal, S., Pereira, K., Bhatia, S., & Ramasamy, R. (2016). Percutaneous embolization of varicocele: Technique, indications, relative contraindications, and complications. *Asian Journal of Andrology*. <https://doi.org/10.4103/1008-682X.169985>
- Hanson, B., Johnstone, E., Dorais, J., Silver, B., Peterson, C. M., & Hotaling, J. (2017). Female infertility, infertility-associated diagnoses, and comorbidities: a review. *Journal of Assisted Reproduction and Genetics*. <https://doi.org/10.1007/s10815-016-0836-8>
- Ilaqua, A., Izzo, G., Emerenziani, G. Pietro, Baldari, C., & Aversa, A. (2018). Lifestyle and fertility: The influence of stress and quality of life on male fertility. *Reproductive Biology and Endocrinology*. <https://doi.org/10.1186/s12958-018-0436-9>
- Jargiello, T., Drelich-Zbroja, A., Falkowski, A., Sojka, M., Pyra, K., & Szczerbo-Trojanowska, M. (2015). Endovascular transcatheter embolization of recurrent postsurgical varicocele: Anatomic reasons for surgical failure. *Acta Radiologica*, 56(1). <https://doi.org/10.1177/0284185113519624>
- Kesari, K. K., Agarwal, A., & Henkel, R. (2018). Radiations and male fertility. *Reproductive biology and endocrinology: RB&E*. <https://doi.org/10.1186/s12958-018-0431-1>
- Kuncoro, S. (2015). Informasi BPJS Kesehatan dan KIS, Daftar Penyakit Yang Ditanggung BPJS Kesehatan.
- Li, Y., Lin, Y., Ou, C., Xu, R., Liu, T., Zhong, Z., & Liu, L. (2024). Association between body mass index and semen quality: a systematic review and meta-analysis. *Int J Obes (Lond)*, 48(10), 1383–1401. <https://doi.org/10.1038/s41366-024-01580-w>
- Lomboy, J. R., & Coward, R. M. (2016). The Varicocele: Clinical Presentation, Evaluation, and Surgical Management. *Seminars in Interventional Radiology*, 33(3). <https://doi.org/10.1055/s-0036-1586143>
- Marques-Pinto, A., & Carvalho, D. (2013). Human infertility: are endocrine disruptors to blame? *Endocrine Connections*. <https://doi.org/10.1530/ec-13-0036>
- Menkveld, R., Holleboom, C. A. G., & Rhemrev, J. P. T. (2011). Measurement and significance of sperm morphology. *Asian Journal of Andrology*. <https://doi.org/10.1038/aja.2010.67>
- Minhas, S., Bettocchi, C., Boeri, L., Capogrosso, P., Carvalho, J., Cilesiz, N. C., ... Salonia, A. (2021). European Association of Urology Guidelines on Male Sexual and Reproductive Health: 2021 Update on Male Infertility. *European Urology*. <https://doi.org/10.1016/j.eururo.2021.08.014>

- Mostafa, T., Rashed, L., Nabil, N., & Amin, R. (2014). Seminal BAX and BCL2 gene and protein expressions in infertile men with varicocele. *Urology*, *84*(3), 590–595. <https://doi.org/10.1016/j.urology.2014.05.016>
- Oktarina, A., Abadi, A., & Bachsin, R. (2014). Faktor-faktor yang Memengaruhi Infertilitas pada Wanita di Klinik Fertilitas Endokrinologi Reproduksi. *Majalah Kedokteran Sriwijaya*.
- Paick, S., & Choi, W. S. (2019). Varicocele and testicular pain: A review. *World Journal of Men's Health*. <https://doi.org/10.5534/wjmh.170010>
- Pastuszak, A. W., & Wang, R. (2015). Varicocele and testicular function. In *Asian Journal of Andrology* (Vol. 17). <https://doi.org/10.4103/1008-682X.153539>
- Patil, N., & Javali, T. (2022). Varicolectomy in adolescents – Does it safeguard future fertility? A single centre experience. *Journal of Pediatric Urology*, *18*(1). <https://doi.org/10.1016/j.jpuro.2021.11.020>
- Patrizio, P., Esposito, M., Kulshrestha, S., & Khorram, O. (2000). Female infertility. In *Handbook of the Assisted Reproduction Laboratory*. <https://doi.org/10.1016/B978-0-323-47912-7.00022-6>
- Russo, G. I., Saleh, R., Finocchi, F., Juma, A. R., Durairajanayagam, D., Kahraman, O., ... Agarwal, A. (2024). Impact of Varicocele on Testicular Oxidative Stress and Sperm Parameters in Experimental Animals: A Systematic Review and Meta-Analysis. *World Journal of Men's Health*, *42*. <https://doi.org/10.5534/wjmh.230260>
- Schauer, I., & Mohamad Al-Ali, B. (2018). Combined effects of varicocele and cell phones on semen and hormonal parameters. *Wiener Klinische Wochenschrift*, *130*(9–10), 335–340. <https://doi.org/10.1007/s00508-017-1277-9>
- Shah, K., Sivapalan, G., Gibbons, N., Tempest, H., & Griffin, D. K. (2003). The genetic basis of infertility. *Reproduction*. <https://doi.org/10.1530/rep.0.1260013>
- Sherwood, L. (2014). *Fisiologi Manusia dari Sel ke Sistem*. Philadelphia: Elsevier.
- Tawadrous, G. A., Aziz, A. A., & Mostafa, T. (2013). Seminal soluble fas relationship with oxidative stress in infertile men with varicocele. *Urology*, *82*(4), 820–823. <https://doi.org/10.1016/j.urology.2013.06.018>
- Trokoudes, K. M., Skordis, N., & Picolos, M. K. (2006). Infertility and thyroid disorders. *Current Opinion in Obstetrics and Gynecology*. <https://doi.org/10.1097/01.gco.0000233941.89919.31>
- Uribe Larrea, L. M. L. (2008). The psychological impact of infertility. *Papeles del Psicologo*. <https://doi.org/10.1016/j.bpobgyn.2006.12.003>
- Vander Borcht, M., & Wyns, C. (2018). Fertility and infertility: Definition and epidemiology. *Clinical Biochemistry*. <https://doi.org/10.1016/j.clinbiochem.2018.03.012>
- Vivas-Acevedo, G., Lozano, J. R., & Camejo, M. I. (2010). Effect of varicocele grade and age on seminal parameters. *Urologia Internationalis*, *85*(2), 194–199. <https://doi.org/10.1159/000314226>
- Wadhwa, V., Kashanian, J. A., Schiffman, M., & McClure, T. D. (2021). Varicocele Embolization: Patient Selection: Preprocedure Workup, and Technical Considerations. *Seminars in Interventional Radiology*, *38*(2). <https://doi.org/10.1055/s-0041-1727105>



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Korelasi Antara Derajat Varikokel Berdasarkan Ultrasonografi Dengan Hasil Analisis Sperma Pada Pasien Infertilitas

Fradita Eka Sukardi, Dr. dr. Bambang Supriyadi, Sp. Rad, Subsp. MSK (K), M.M.; dr. Anita Ekowati, Sp. Rad., Subsp. MSK (K), M.M.
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